



REID, QUEBE, ALLISON, WILCOX
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CONSULTING ENGINEERS

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January 25, 1980

Mr. Greg Vanderlaan
USEPA
Region V
230 South Dearborn
Chicago, IL 60604

Dear Greg:

This is to confirm our conversation of January 22, 1980, regarding the testing at the Lane Landfill. It is our intent to begin surveying on the Landfill on January 30, 1980, with sample acquisition to begin February 4, 1980.

It is our understanding that you will be in Indianapolis on February 4, 1980, to observe sample acquisition.

If you have questions or comments regarding this letter, please do not hesitate to contact us.

Yours truly,

REID, QUEBE, ALLISON, WILCOX & ASSOCIATES, INC.

David B. Vornehm
Environmental Specialist

DBV/kdb

cc: C. M. Robson/DPW
David Lamm/ISBH
Robert Penno/ISBH
Tom Bramscher/USEPA
Neil Denbo/USEPA
Fred Lind/TBC
Jack Lane/Lane Landfill ✓

May 15, 1980

Reid, Quebe, Allison, Wilcox & Associates, Inc.
3901 Industrial Blvd.
Indianapolis, Indiana 46254
Attn: David Vornehm
Evoyd Horsley

Gentlemen:

Attached is the final report on the sludge leachate study performed for RQAW under contract to the City of Indianapolis.

Data is complete, unless additional analyses will be required. In a very few cases it was not possible to report PCB data due to any one of a variety of reasons which we can discuss with you, if necessary, at your convenience.

All information is submitted in tabular format. In addition, we have included a brief narrative section which outlines the methodology used and rationalizes some apparent anomalies.

Should you have any questions please feel free to contact us.

Very truly yours,



C. Steven Gohmann
EMS LABORATORIES

CSG/jiw
Enclosure

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109 pages

INTRODUCTION

Sixteen sludge samples were analyzed for leachable pollutants utilizing a Standard Leachate Test (SLT) in both the Concentration (SLT-C) and Release (SLT-R) modes. Five samples were run in triplicate in the release mode; two samples were run in triplicate in the concentration mode and five samples were run in duplicate only in the concentration mode because of insufficient sample. Results are expressed mg/l in the filtered aqueous leachate as well as in mg/kg of solid waste.

METHODS AND PROCEDURES

Leachate preparation procedures were virtually identical to those detailed in "Comparison of Three Waste Leaching Tests" (EPA-600/2-79-071) pages 8-12. Deionized water was used as the leaching solution.

For the release mode, a solid-liquid ration of 10:1 (dry solids weight basis) was maintained for the duration of the study (eg 1 gram dry sludge to 10 ml of solution). For the concentration mode, solid-liquid ratios of 1:10, 1:8, 1:6, 1:4 and 1:2 were used on steps one through five respectively.

The analytical methods used were as follows:

<u>PARAMETER</u>	<u>METHOD</u>
Cadmium	Flameless Atomic Absorption
Lead	Flameless Atomic Absorption
Zinc	Flame Atomic Absorption
Copper	Flame Atomic Absorption
Chromium	Flame Atomic Absorption
pH	Electrode
Total Dissolved Solids	Gravimetric
Chloride	Mercuric Nitrate Titration
PCB	Gas Chromatography w/cleanup as necessary

RESULTS AND DISCUSSION

All results are expressed in tabular form. In most cases, levels of chemical species measured were at or very near the detection limit. Generally, the measurable components increased in concentration in the concentration mode and decreased in concentration in the release mode. In some cases, however just the opposite was found: some values decreased in the concentration mode and/or increased in the release mode.

Several factors may have been responsible for these unexpected fluctuations in data. One of the most important was the difficulty in obtaining a representative sample. Additionally, variabilities in cation exchange capacity as well as differences in adsorption characteristics of the sludge particles could easily account for decreases or increases in values in either mode.

PCB analyses were performed on all samples and chromatographic calibration data were based on Aroclor 1016 and Aroclor 1260.

Analytical results for the highly chlorinated biphenyls (eg. 5-10 chlorine atoms/molecule) are relatively easily interpreted and unambiguous. Retention patterns of these heavier PCB mixtures are characteristic of such mixtures and as such can be used to confirm or disprove the presence of these higher boiling homologues. ASTM Standards show that, "Present knowledge indicates that higher boiling homologues of chlorinated biphenyls are less degradable than the lower boiling homologues, if present in the environment". Therefore analytical data for these more toxic PCB mixtures is quite important.

Data for lower boiling homologues (less than five chlorine atoms per molecule) are somewhat more susceptible to interferences. Compounds such as substituted benzenes and phenols can interfere positively with the analysis. Any data above detectable limits generated for this report strongly suggest the presence of PCB's. Confirmation by GC/MS of the lower boiling homologues is recommended, should the levels detected be of concern.

In most cases, data for chloride and dissolved solids followed similar patterns, increasing in the concentration mode and decreasing in the release mode. Values for pH appear to vary randomly.

Results and Discussion

Page 2

Continued:

Heavy metal data also followed a general pattern, but seemed more susceptible to variations in sample composition. In some cases, metals were actually removed from solution when fresh sample was added in the concentration mode. This phenomenon was also observed in some PCB data. Such data strongly suggests sufficient cation exchange capacity and/or adsorptivity within the samples themselves to prevent the formation of high concentrations of these chemical species in solution.

CONCENTRATIONS EXPRESSED AS MILLIGRAMS PER LITER EXCEPT pH

STANDARD LEACHATE TEST
MODE RELEASE

SAMPLE REFERENCE A

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.40	8.36	8.34	8.34
PCB 1016	.002	.07	.02	.02	.012
PCB 1260	< .0001	.05	.03	< .0001	.003
CHLORIDE	16	< 5	< 5	< 5	< 5
TDS	1192	0628	504	444	304
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	.013	.025	< .01	< .01	< .01
ZINC	.10	.06	.05	.08	.04
COPPER	< .01	< .01	.02	.02	.02
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

A

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.18	8.04	7.96	8.13	8.24
PCB 1016	.0016	.002	< .0001	.002	.006
PCB 1260	< .0001	< .0001	< .0001	< .0001	.023
CHLORIDE	12	22	38	60	90
TDS	< 25	1720	2780	3480	4490
CADMIUM	< .001	< .001	< .001	.0011	.0011
LEAD	< .01	< .01	< .01	.031	< .01
ZINC	.03	.32	.25	.45	.21
COPPER	.03	.03	.04	.05	.05
CHROMIUM	< .01	< .01	< .01	.02	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

A

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.18	8.04	7.96	8.13	8.24
PCB 1016	.0016	.002	< .0001	.002	.006
PCB 1260	< .0001	< .0001	< .0001	< .0001	.023
CHLORIDE	12	22	38	60	90
TDS	< 25	1720	2780	3480	4490
CADMIUM	< .001	< .001	< .001	.0011	.0011
LEAD	< .01	< .01	< .01	.031	< .01
ZINC	.03	.32	.25	.45	.21
COPPER	.03	.03	.04	.05	.05
CHROMIUM	< .01	< .01	< .01	.02	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

B

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.29	8.21	8.19	8.24
PCB 1016	< .0001	.006	< .0001	< .0001	.01
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	9	< 5	< 5	< 5	< 5
TDS	1212	680	484	432	344
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	.026	.012	.03	< .01	< .01
ZINC	.11	.06	.07	.07	.07
COPPER	< .01	< .01	.02	.01	.02
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
CONCENTRATION
MODE

SAMPLE REFERENCE

B - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.30	N/A	8.18	8.04	7.90
PCB 1016	.0011	.016	.07	.0002	~ .01
PCB 1260	< .0001	.006	< .0001	.003	.0006
CHLORIDE	15	25	45	49	86
TDS	1140	1756	2436	3012	4096
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	0.013	< 0.01
ZINC	0.06	0.06	0.10	0.10	0.14
COPPER	< 0.01	< 0.01	0.02	0.02	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	0.02	0.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE BMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.12	8.03	8.12	8.18
PCB 1016	< .0001	.0005	< .0001	.00034	.00038
PCB 1260	< .0001	< .0001	< .0001	< .0001	.05
CHLORIDE	12	31	43	59	92
TDS	940	1790	2780	3240	4200
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.03	.13	.12	.05	.06
COPPER	.02	.02	.03	.02	.03
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE

SAMPLE REFERENCE

C

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.22	8.46	8.28	8.28	8.15
PCB 1016	.001	.002	.008	.02	.007
PCB 1260	< .0001	.006	.014	.005	.002
CHLORIDE	11	< 5	< 5	< 5	< 5
TDS	1080	584	448	528	416
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	.020	< .01	< .01	< .01	< .01
ZINC	.08	.04	.04	.06	.07
COPPER	< .01	< .01	< .01	.02	< .01
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE RELEASESAMPLE REFERENCE C - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.17	8.33	8.31	8.33	8.50
PCB 1016	.008	.007	< .0001	.0002	< .0001
PCB 1260	.004	< .0001	< .0001	.0005	< .0001
CHLORIDE	11	< 5	< 5	< 5	< 5
TDS	1200	372	224	324	400
CADMIUM	< 0.001	< 0.001	< .001	< 0.001	< .001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.12	0.03	0.04	0.05	0.02
COPPER	0.03	0.02	0.02	< 0.01	0.05
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

C - Triplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.19	8.33	8.45	8.39	8.40
PCB 1016	.001	.01	.0007	.0005	.0002
PCB 1260	< .0001	.003	< .0001	< .0001	< .0001
CHLORIDE	12	< 5	< 5	< 5	< 5
TDS	1044	352	312	272	348
CADMIUM	0.0022	0.0013	0.0012	0.0023	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	0.061	< 0.01
ZINC	0.16	0.06	0.03	0.16	0.03
COPPER	0.04	0.02	< 0.01	0.02	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE C

MODE _____

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.10	8.05	8.13	8.36
PCB 1016	.0012	.01	.0079	.013	.004
PCB 1260	< .0001	< .0001	.021	.06	.015
CHLORIDE	13	25	37	59	92
TDS	920	1800	2724	3372	3800
CADMIUM	< .001	< .001	< .001	< .001	.0015
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.05	.15	.31	.23	.07
COPPER	.02	.03	.03	.02	.04
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE CONCENTRATIONSAMPLE REFERENCE C - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.25	7.96	7.95	7.93	8.10
PCB 1016	.09	.03	NO RESULTS	~ .01	< .0001
PCB 1260	.0006	< .0001	< .0001	.0005	< .0001
CHLORIDE	15	30	40	66	86
TDS	836	1300	1788	2780	3860
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.04	0.13	0.15	0.13	0.11
COPPER	0.03	0.03	0.02	0.02	0.02
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE CONCENTRATION

SAMPLE REFERENCE

C - Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.9	7.7	8.03	8.14	8.0
PCB 1016	.01	.0002	.03	.02	.004
PCB 1260	.007	.0003	.01	< .0001	.007
CHLORIDE	16	32	41	78	99
TDS	984	1968	3072	3240	3728
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.22	0.29	0.43	0.46	0.40
COPPER	< 0.01	0.02	< 0.01	0.03	0.06
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE _____

SAMPLE REFERENCE

D

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.97	8.24	8.16	8.34	8.15
PCB 1016	< .0001	< .0001	.0002	.06	< .0001
PCB 1260	.018	< .0001	.1	.012	< .0001
CHLORIDE	12	< 5	< 5	< 5	< 5
TDS	660	700	572	480	304
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	.045	< .01	.025	.023	.05
ZINC	.08	.03	.07	< .02	.04
COPPER	< .01	< .01	< .01	< .01	< .01
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE RELEASESAMPLE REFERENCE D - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.28	8.34	8.46	8.47
PCB 1016	.01	.0007	< .0001	.008	.0008
PCB 1260	< .0001	< .0001	< .0001	< .0001	.004
CHLORIDE	10	5	< 5	< 5	< 5
TDS	1096	444	252	324	244
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.14	0.04	0.03	0.02	0.02
COPPER	0.02	0.02	< 0.01	< 0.01	< .01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE D - Triplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.17	8.26	8.33	8.56	8.35
PCB 1016	.01	.006	.002	.008	< .0001
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	12	< 5	< 5	< 5	< 5
TDS	1132	396	280	276	436
CADMIUM	0.0017	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	0.026
ZINC	0.16	0.06	0.03	0.02	0.05
COPPER	0.05	0.02	< 0.01	< 0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE DMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.13	8.04	8.11	8.13
PCB 1016	.001	.01	.008	.013	.004
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	14	29	43	63	90
TDS	1124	1908	2796	3432	4424
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.07	.09	.14	.30	.06
COPPER	.08	.04	.03	.03	.03
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE

SAMPLE REFERENCE E

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.23	8.36	8.41	8.35	8.24
PCB 1016	< .0001	< .0001	.0002	.001	.005
PCB 1260	.02	.002	.025	< .0001	.0005
CHLORIDE	12	< 5.0	< 5.0	< 5.0	< 5.0
TDS	1220	480	372	356	444
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	.018
ZINC	.11	.070	.052	.061	.06
COPPER	< .01	.03	.02	.03	.03
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE EMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.31	8.17	8.08	8.13	8.01
PCB 1016	.009	.09	.07	< .0001	.08
PCB 1260	< .0001	< .0001	< .0001	< .0001	.015
CHLORIDE	14	24	43	59	84
TDS	736	1400	2380	3120	4048
CADMIUM	.0039	< .001	< .001	< .001	< .001
LEAD	.05	< .01	< .01	< .01	< .01
ZINC	.16	.09	.09	.08	.06
COPPER	.04	.03	.02	.02	.02
CHROMIUM	< .01	< .01	< .01	.02	.03

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

F

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.26	8.32	8.50	8.35	8.34
PCB 1016	.005	NO RESULTS	.01	.002	.002
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	4	< 5	< 5.0	< 5	< 5
TDS	480	160	132	128	152
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.03	.015	.008	.013	< .01
COPPER	.04	.04	.03	.02	< .01
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE F

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.96	8.03	8.11	8.02	7.96
PCB 1016	~ .01	~ .01	~ .01	.02	~ .01
PCB 1260	< .0001	< .0001	< .0001	< .0001	.006
CHLORIDE	4	10	14	20	29
TDS	320	604	1116	1620	2516
CADMIUM	< .001	.0021	.0024	.0042	.006
LEAD	.024	.044	< .01	< .01	< .01
ZINC	.05	.06	.05	.08	.11
COPPER	.07	.05	.05	.05	.06
CHROMIUM	< .01	< .01	< .01	.03	.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE CONCENTRATION

SAMPLE REFERENCE

F - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.3	7.7	8.13	8.06	8.0
PCB 1016	NO RESULTS	< .0001	< .0001	.0008	.0007
PCB 1260	< .0001	< .0001	.001	< .0001	< .0001
CHLORIDE	10	11	9	31	50
TDS	388	732	1104	1732	3212
CADMIUM	< 0.001	0.002	0.0053	0.0060	0.0070
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.04	0.05	0.08	0.13	0.18
COPPER	0.05	0.04	0.04	0.04	0.08
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE GMODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.27	8.35	8.44	8.50
PCB 1016	< .0001	.005	< .0001	< .0001	< .0001
PCB 1260	< .0001	< .0001	< .0001	.002	< .0001
CHLORIDE	8.0	< 5	< 5	< 5	< 5
TDS	1270	372	280	240	336
CADMIUM	.002	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.11	.03	.03	.04	.02
COPPER	< .01	.02	.03	.05	.02
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE GMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.94	8.04	8.03	8.07	8.07
PCB 1016	NO RESULTS	~ .01	~ .01	~ .01	0.1
PCB 1260	NO RESULTS	< .0001	< .0001	< .0001	< .0001
CHLORIDE	5	20	34	45	74
TDS	996	2052	2924	3472	3450
CADMIUM	< .001	.0066	.0066	.0033	.0066
LEAD	< .01	< .01	< .01	< .01	.013
ZINC	.13	.34	.40	.36	.63
COPPER	.07	.06	.06	.03	.06
CHROMIUM	< .01	.02	.03	.03	.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE _____

SAMPLE REFERENCE

H

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.06	8.38	8.27	8.17	8.34
PCB 1016	.0002	.0001	< .0001	< .0001	< .0001
PCB 1260	.03	< .0001	< .0001	< .0001	< .0001
CHLORIDE	5	< 5	< 5	< 5	< 5
TDS	1300	270	180	160	248
CADMUM	.0056	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.15	.159	.032	.013	.02
COPPER	.02	.03	.03	.02	.04
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

H

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.95	7.82	8.00	7.98	7.97
PCB 1016	.002	.07	~ .01	~ .01	.04
PCB 1260	< .0001	< .0001	< .0001	< .0001	.001
CHLORIDE	8	14	24	29	49
TDS	1052	2200	2552	2756	3232
CADMIUM	.0051	.0106	.0091	.010	.0091
LEAD	.01	< .01	< .01	< .01	< .01
ZINC	.13	.33	.27	.37	.40
COPPER	.04	.04	.05	.06	.07
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE RELEASE

SAMPLE REFERENCE

I

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.09	8.31	8.45	8.39	8.36
PCB 1016	.002	.0007	.0008	.0002	< .0001
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	8	< 5	< 5	< 5	< 5
TDS	1390	412	336	272	284
CADMIUM	0.0032	< .001	< 0.001	< .001	< .001
LEAD	< 0.01	< 0.01	< .01	< .01	< .01
ZINC	0.22	0.081	0.045	0.037	0.04
COPPER	0.02	0.04	0.03	0.03	0.04
CHROMIUM	< 0.01	< 0.01	< .01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
CONCENTRATION
MODE _____

SAMPLE REFERENCE I

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.03	6.90	7.32	8.11	8.27
PCB 1016	.001	.005	.003	.05	0.008
PCB 1260	.002	< .0001	< .0001	< .0001	< .0001
CHLORIDE	15	20	30	.46	.61
TDS	780	1780	2010	2600	2970
CADMIUM	.0084	.0158	.0096	.0158	.0164
LEAD	.05	.027	< .01	< .01	< .01
ZINC	.25	.34	.26	.45	.16
COPPER	.06	.07	.05	.07	.07
CHROMIUM	< .01	.02	.02	.02	.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

I - Duplicate

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.1	7.6	8.0	8.09	8.1
PCB 1016	.0007	.002	< .0001	< .0001	.0004
PCB 1260	< .0001	.002	.005	< .0001	< .0001
CHLORIDE	5.0	24	20	57	78
TDS	1156	2464	3036	3452	3712
CADMUM	0.0111	0.0160	0.0014	0.0014	0.0036
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.12	0.29	0.32	0.47	0.56
COPPER	0.04	0.07	0.03	0.04	0.05
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE _____ RELEASE _____

SAMPLE REFERENCE

J

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.96	8.35	8.24	8.26	8.20
PCB 1016	.0014	.005	.0003	.02	.01
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	4	< 5	< 5	< 5	< 5
TDS	1348	596	664	384	316
CADMIUM	.0018	< .001	< .001	< .001	< .001
LEAD	.012	< .01	< .01	< .01	.015
ZINC	.23	.06	.04	.04	.05
COPPER	< .01	< .01	.03	.02	.02
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE RELEASE

SAMPLE REFERENCE

J - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.03	8.31	8.29	8.51	8.55
PCB 1016	.0024	.0002	< .0001	.0001	.0018
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	6	< 5	< 5	< 5	< 5
TDS	1212	308	192	48	376
CADMIUM	0.0027	< 0.001	< 0.001	< 0.001	0.0012
LEAD	< 0.01	< 0.01	< 0.01	0.10	0.033
ZINC	0.10	0.02	0.02	0.02	< 0.01
COPPER	0.07	0.03	0.02	< 0.01	0.04
CHROMIUM	0.02	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE J - TriplicateMODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.27	8.32	8.47	8.46	8.38
PCB 1016	.01	.02	.002	.001	.00065
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	6	< 5	< 5	< 5	< 5
TDS	1180	392	240	200	148
CADMIUM	0.0056	< 0.001	0.0012	0.0012	0.0013
LEAD	0.019	< 0.01	< 0.01	< 0.01	0.0025
ZINC	0.13	0.05	< 0.01	< 0.01	0.05
COPPER	0.04	0.04	0.02	< 0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE CONCENTRATION

SAMPLE REFERENCE

J

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.28	8.04	8.17	xxx	xxx
PCB 1016	.02	.05	.0007	xxx	xxx
PCB 1260	< .0001	< .0001	< .0001	xxx	xxx
CHLORIDE	5	15	30	xxx	xxx
TDS	116	1764	2552	xxx	xxx
CADMIUM	.0028	.0066	.0157	xxx	xxx
LEAD	< .01	< .01	< .01	xxx	xxx
ZINC	.08	.20	.18	xxx	xxx
COPPER	.03	.03	.05	xxx	xxx
CHROMIUM	< .01	< .01	.02	xxx	xxx

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE J - Duplicate

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.02	8.01	7.89	7.65	7.81
PCB 1016	.07	.005	.03	.002	.002
PCB 1260	.004	.01	.007	.04	< .0001
CHLORIDE	10	18	28	55	57
TDS	1150	2370	3350	3740	4690
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	0.012	0.055	0.024	< 0.01	0.024
ZINC	0.07	0.30	0.24	0.40	0.07
COPPER	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHROMIUM	0.02	< 0.01	0.01	0.01	0.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE RELEASE

SAMPLE REFERENCE K

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.10	8.27	8.31	8.28	8.26
PCB 1016	.01	< .0001	.01	< .0001	.003
PCB 1260	.007	< .0001	.003	< .0001	< .0001
CHLORIDE	13	< 5	< 5	< 5	< 5
TDS	1630	368	268	340	368
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.09	.056	.042	.057	.05
COPPER	.02	.03	.02	.03	.04
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE _____ CONCENTRATION _____

SAMPLE REFERENCE _____

K

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.94	6.85	7.25	8.03	8.09
PCB 1016	< .0001	.004	.02	.004	~ .01
PCB 1260	< .0001	.004	.005	< .0001	.001
CHLORIDE	15	30	41	61	75
TDS	990	2300	2730	2770	3772
CADMIUM	.0014	< .001	< .001	< .001	< .001
LEAD	< .01	.012	< .01	< .01	.071
ZINC	.09	.10	.11	.14	.10
COPPER	.06	.04	.03	.02	.02
CHROMIUM	< .01	.02	< .01	.02	.03

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE CONCENTRATION

SAMPLE REFERENCE

K - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.1	7.6	8.05	7.96	8.2
PCB 1016	.02	.006	.02	< .0001	< .0001
PCB 1260	.007	.02	.005	.01	.01
CHLORIDE	20	33	48	73	106
TDS	1552	2704	3184	3580	4068
CADMIUM	< 0.001	0.0014	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.13	0.24	0.25	0.32	0.32
COPPER	0.02	0.03	0.04	0.04	0.05
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE

SAMPLE REFERENCE

L

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.98	8.92	8.61	8.56	8.34
PCB 1016	< .0001	.01	.0002	.02	.009
PCB 1260	< .0001	< .0001	.003	< .0001	< .0001
CHLORIDE	7	< 5	< 5	< 5	< 5
TDS	684	304	332	336	380
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	< .02	.02	< .01	.02	.02
COPPER	.09	.06	.04	.03	.03
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

MODE RELEASE

SAMPLE REFERENCE

L - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.44	8.37	8.50	8.59
PCB 1016	.0002	< .0001	< .0001	.004	< .0005
PCB 1260	.03	< .0001	.004	.03	.005
CHLORIDE	10	5	< 5	< 5	< 5
TDS	940	240	168	124	140
CADMIUM	0.0017	0.0065	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	0.0043	< 0.01	< 0.01	< 0.01
ZINC	0.12	0.08	0.02	0.02	< 0.01
COPPER	0.04	0.03	0.02	0.04	0.02
CHROMIUM	< 0.01	0.02	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

L - Duplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.44	8.37	8.50	8.59
PCB 1016	.0002	< .0001	< .0001	.004	< .0005
PCB 1260	.03	< .0001	.004	.03	.005
CHLORIDE	10	5	< 5	< 5	< 5
TDS	940	240	168	124	140
CADMIUM	0.0017	0.0065	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	0.0043	< 0.01	< 0.01	< 0.01
ZINC	0.12	0.08	0.02	0.02	< 0.01
COPPER	0.04	0.03	0.02	0.04	0.02
CHROMIUM	< 0.01	0.02	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE L - Triplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.19	8.46	8.54	8.47	8.46
PCB 1016	.02	.01	.004	.07	.002
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	16	< 5	5	< 5	< 5
TDS	1176	268	276	172	260
CADMIUM	0.004	0.0011	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.06	< 0.01	< 0.01	< 0.01	0.02
COPPER	0.14	0.09	0.05	0.05	0.04
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

L

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.99	7.08	7.40	8.10	8.11
PCB 1016	.04	.03	.01	.02	< .0001
PCB 1260	< .0001	< .0001	.003	.03	.02
CHLORIDE	4	30	51	66	86
TDS	670	2460	2850	3284	3724
CADMIUM	.0140	.0174	.005	.0146	.030
LEAD	.012	< .01	< .01	< .01	< .01
ZINC	.06	.07	.06	.16	.08
COPPER	.04	.05	.24	.25	.14
CHROMIUM	< .01	< .01	< .01	< .01	.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE _____

SAMPLE REFERENCE M

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.14	8.12	8.32	8.41	8.46
PCB 1016	< .0001	.0006	.01	< .0001	< .0001
PCB 1260	< .0001	.006	< .0001	< .0001	< .0001
CHLORIDE	7.0	< 5	< 5	< 5	< 5
TDS	824	824	236	200	304
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.08	.04	.04	.03	.03
COPPER	< .01	.06	.02	< .01	< .01
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE MMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.95	7.20	7.37	xxx	xxx
PCB 1016	NO RESULTS	NO RESULTS	.008	xxx	xxx
PCB 1260	NO RESULTS	NO RESULTS	<.0001	xxx	xxx
CHLORIDE	4	21	30	xxx	xxx
TDS	1090	2410	2784	xxx	xxx
CADMIUM	<.001	<.001	.0157	xxx	xxx
LEAD	<.01	<.01	.04	xxx	xxx
ZINC	.05	.11	.79	xxx	xxx
COPPER	<.01	.02	.09	xxx	xxx
CHROMIUM	<.01	<.01	.05	xxx	xxx

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE _____ M - Duplicate

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.22	N/A	8.09	8.11	8.23
PCB 1016	.009	.07	.04	.08	.05
PCB 1260	.03	< .0001	.0002	.02	.003
CHLORIDE	15	20	30	50	66
TDS	1132	1816	2804	3156	3604
CADMUM	< 0.0017	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.06	0.08	0.15	0.09	0.12
COPPER	0.02	0.02	0.02	0.03	0.03
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE M - Triplicate

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.1	7.6	7.85	8.0	8.1
PCB 1016	.004	.08	.003	.02	.002
PCB 1260	< .0001	.008	.002	~ .01	< .0001
CHLORIDE	15	27	31	51	73
TDS	1140	2084	2900	3096	3736
CADMIUM	0.004	0.003	0.0115	0.0115	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.12	0.29	0.51	0.6	0.48
COPPER	< 0.01	0.02	0.02	0.02	0.05
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	0.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE _____

SAMPLE REFERENCE

N

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.09	8.24	8.40	8.45	8.50
PCB 1016	< .0001	.008	.004	.0007	< .0001
PCB 1260	.002	.056	< .0001	< .0001	< .0001
CHLORIDE	9	< 5	< 5	< 5	< 5
TDS	1452	400	316	260	284
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.10	.03	.03	.03	.02
COPPER	.02	.05	.03	.03	.02
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE N

MODE

CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.05	7.26	7.30	8.03	8.11
PCB 1016	.03	.09	.01	.01	< .0001
PCB 1260	.02	.02	< .0001	< .0001	.0008
CHLORIDE	15	30	35	56	81
TDS	1550	3380	3368	3780	4508
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	.022	< .01	.011	< .01	< .01
ZINC	.10	.10	.07	.10	.05
COPPER	.02	.02	.03	.03	.03
CHROMIUM	< .01	.02	.02	.02	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE CONCENTRATION

SAMPLE REFERENCE N - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.26	N/A	8.08	8.03	8.14
PCB 1016	.01	.016	~ .01	.001	.004
PCB 1260	.06	< .0001	< .0001	< .0001	~ .01
CHLORIDE	15	30	40	54	82
TDS	1216	2376	3308	3684	4592
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	0.025	< 0.01	< 0.01
ZINC	0.04	0.05	0.09	0.16	0.10
COPPER	0.03	0.02	0.03	0.02	0.02
CHROMIUM	< 0.01	< 0.01	0.02	0.02	0.02

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

0

MODE

RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.11	8.44	8.24	8.51	8.40
PCB 1016	.0005	~ .01	.007	.01	.02
PCB 1260	.01	< .0001	.0009	.004	.003
CHLORIDE	9	< 5	< 5	< 5	< 5
TDS	1396	512	368	356	248
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.11	.03	.02	.02	.03
COPPER	< .01	< .01	.02	< .01	< .01
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

0 - Duplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.16	8.33	8.46	8.40	8.40
PCB 1016	.004	.0006	.003	.00048	< .0001
PCB 1260	.004	< .0001	.0003	.006	< .0001
CHLORIDE	10	< 5	< 5	< 5	< 5
TDS	1088	232	168	112	116
CADMIUM	< 0.001	0.0011	< 0.001	0.0011	< 0.001
LEAD	< 0.01	0.047	< 0.01	< 0.01	< 0.01
ZINC	0.10	0.04	< 0.01	< 0.01	< 0.01
COPPER	0.02	0.02	< 0.01	< 0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

0 -Triplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.97	8.29	8.48	8.45	8.46
PCB 1016	.02	.005	.004	< .0001	< .0001
PCB 1260	.05	.001	< .0001	< .0001	< .0001
CHLORIDE	12	< 5	< 5	< 5	< 5
TDS	1212	356	268	232	244
CADMIUM	< 0.001	< 0.001	0.0024	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	0.05	< 0.01	< 0.01
ZINC	0.08	0.05	0.09	0.03	0.03
COPPER	< 0.01	0.02	0.02	0.02	0.02
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
CONCENTRATION
MODE _____

SAMPLE REFERENCE 0

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.10	N/A	7.78	7.84	7.88
PCB 1016	.05	.009	.02	.01	.004
PCB 1260	.01	.002	.03	< .0001	< .0001
CHLORIDE	13	30	34	52	76
TDS	960	1444	2452	3420	4528
CADMIUM	< .001	< .001	< .001	< .001	< .001
LEAD	< .01	< .01	< .01	< .01	< .01
ZINC	.06	.04	.12	.15	.11
COPPER	< .01	< .01	< .01	.04	.02
CHROMIUM	< .01	< .01	< .01	< .01	< .01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
RELEASE
MODE

SAMPLE REFERENCE LAGOON C

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.47	8.53	8.23	8.25	8.24
PCB 1016	.02	.0002	.0009	.005	.003
PCB 1260	< .001	.005	< .001	.002	< .0001
CHLORIDE	50	16	8	6	6
TDS	592	212	464	704	752
CADMIUM	< 0.001	< .001	< 0.001	< 0.001	< .001
LEAD	< 0.01	< 0.01	< .01	< 0.01	< 0.01
ZINC	0.02	0.03	0.02	0.07	0.11
COPPER	0.01	0.01	< 0.01	< 0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE RELEASE

SAMPLE REFERENCE LAGOON C - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.48	8.51	8.38	8.25	8.23
PCB 1016	.0006	.002	.003	.03	.014
PCB 1260	< .001	.04	< .001	.03	< .001
CHLORIDE	46	16	10	6	6
TDS	480	220	492	560	712
CADMIUM	< 0.001	< .001	< .001	< .001	< .001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.02	0.01	0.02	0.06	0.12
COPPER	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE LAGOON CMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.48	8.48	8.43	8.43	8.50
PCB 1016	.02	.08	NO RESULTS	.01	.01
PCB 1260	< .0001	< .0001	< .0001	< 0.0001	< .0001
CHLORIDE	50	65	94	124	149
TDS	516	740	1028	1120	1360
CADMIUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	< 0.01	< 0.01	0.016	0.01	0.03
COPPER	< 0.01	< 0.01	< 0.01	0.03	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE LAGOON C - DuplicateMODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.62	8.46	8.43	8.43	8.56
PCB 1016	.002	.002	.0005	.0005	.01
PCB 1260	< .0001	< .0001	< .0001	< .0001	< .0001
CHLORIDE	50	69	94	124	149
TDS	576	920	1016	1200	1248
CADMUM	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.02	0.01	0.02	0.02	0.02
COPPER	0.04	< 0.01	0.04	0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

STANDARD LEACHATE TEST
MODE CONCENTRATION

SAMPLE REFERENCE LAGOON C - Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.45	8.40	8.30	8.43	8.62
PCB 1016	.03	.009	.001	.004	< .0001
PCB 1260	.01	< .0001	< .0001	< .0001	< 0.0001
CHLORIDE	40	69	99	134	178
TDS	464	876	900	1156	1592
CADMIUM	.0035	.0044	< 0.001	< 0.001	< 0.001
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	0.07	0.02	0.01	0.04	0.04
COPPER	< 0.01	< 0.01	< 0.01	0.01	< 0.01
CHROMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

All concentrations expressed as milligrams per liter except pH.

CONCENTRATIONS EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH

STANDARD LEACHATE TEST

SAMPLE REFERENCE

A

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.40	8.36	8.34	8.34
PCB 1016	0.020	0.7	.2	0.2	0.12
PCB 1260	< .001	0.5	< .001	< .001	0.032
CHLORIDE	160	< 50	< 50	< 50	< 50
TDS	11920	6280	5040	4440	3040
CADMIUM	< .01	< .01	< .01	< .01	< .01
LEAD	.13	.25	< .1	< .1	< .1
ZINC	1.0	0.6	0.5	0.8	0.4
COPPER	< 0.1	< 0.1	< 0.2	< 0.2	< 0.2
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

DOE

CONCENTRATION

SAMPLE REFERENCE A

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.18	8.04	7.96	8.13	8.24
PCB 1016	.02	.0085	.0046	.0027	.0037
PCB 1260	< .001	< .0004	< .0002	< .0001	.014
CHLORIDE	120	93	88	81	55
TDS	< 250	7294	6460	4705	2754
CADMIUM	< .01	< .004	< .002	.0015	.00067
LEAD	< 0.1	< .04	< .02	.042	< 0.006
IRON	0.3	1.36	.58	.61	0.129
COPPER	0.3	0.13	.093	.068	0.031
CHROMIUM	< 0.1	< .04	< .02	.027	< 0.006

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

DOE RELEASE

SAMPLE REFERENCE

B

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.29	8.21	8.19	8.24
PCB 1016	< 0.001	.06	< 0.001	< .001	0.1
PCB 1260	< .001	< .001	< .001	< .001	< .001
CHLORIDE	90	< 50	< 50	< 50	< 50
TDS	12120	6800	4840	4320	3440
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	0.26	0.12	0.3	< 0.1	< 0.1
ZINC	1.1	0.6	0.7	0.7	0.7
COPPER	< 0.1	< 0.1	0.2	0.1	0.2
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

NDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE B

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.12	8.03	8.12	8.18
PCB 1016	< .001	.002	< .0002	.0004	.0003
PCB 1260	< .001	< .0004	< .0002	< .00014	.036
CHLORIDE	120	133.5	102	82	66
TDS	9400	7709	6607	4526	2996
ZINC	< 0.01	< .004	< .002	< .0014	< .0007
LEAD	< 0.1	< .04	< .02	< .014	< .007
COPPER	0.3	.56	.28	.070	.043
HROMIUM	0.2	.086	.07	.028	.02
	< 0.1	< .04	< .02	< .014	< .007

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

CONCENTRATION

XDE

SAMPLE REFERENCE B-Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.30	N/A	8.18	8.04	7.90
CB 1016	0.011	0.066	0.16	0.00024	~ 0.0066
CB 1260	< 0.001	0.025	< 0.00022	0.0036	0.0004
CHLORIDE	150	104	101	60	57
DS	11400	7276	5472	3706	2709
LEAD	< 0.01	< 0.004	< 0.0022	< 0.0012	< 0.00066
MERCURY	< 0.1	< 0.04	< 0.022	0.016	< 0.0066
COPPER	0.6	0.25	0.22	0.12	0.093
HROMIUM	< 0.1	< 0.04	< 0.022	0.025	0.013

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

MODE RELEASESAMPLE REFERENCE C

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.22	8.46	8.28	8.28	8.15
PCB 1016	0.01	.02	.08	0.2	0.07
PCB 1260	< 0.001	< 0.001	0.14	0.05	0.018
CHLORIDE	110	< 50	< 50	< 50	< 50
TDS	10800	5840	4480	5280	4160
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	0.2	< 0.1	< 0.1	< 0.1	< 0.1
MERCURY	0.8	0.4	0.4	0.6	0.7
COPPER	< 0.1	< 0.1	< 0.1	0.2	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE

C - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.17	8.33	8.31	8.33	8.50
PCB 1016	.08	.07	< .001	.002	< .001
PCB 1260	0.038	< 0.001	< 0.001	0.005	< 0.001
CHLORIDE	110	< 50	< 50	< 50	< 50
TDS	12000	3720	2240	3240	4000
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	1.2	0.3	0.4	0.5	0.2
COPPER	0.3	0.2	0.2	< 0.1	0.5
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE C - Triplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.19	8.33	8.45	8.39	8.40
PCB 1016	.01	0.1	.007	0.005	.002
PCB 1260	< .001	0.03	< 0.001	< 0.001	< .001
CHLORIDE	120	< 50	< 50	< 50	< 50
TDS	10440	3520	3120	2720	3480
CADMIUM	0.022	0.013	0.012	0.023	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	0.61	< 0.1
ZINC	1.6	0.6	0.3	1.6	0.3
COPPER	0.4	0.2	< 0.1	0.2	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

NDARD LEACHATE TEST

CONCENTRATION

DOE

SAMPLE REFERENCE C

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.10	8.05	8.13	8.36
PCB 1016	0.012	0.04	0.018	0.017	0.0021
PCB 1260	< 0.001	< 0.0004	0.048	0.079	0.008
CHLORIDE	130	105	85	78	50
TDS	9200	7587	6233	4440	2055
CALCIUM	< 0.01	< .0042	< .0023	<.0013	0.0008
LEAD	< 0.1	< .042	< .023	< .013	< .0054
ZINC	0.5	0.63	0.71	0.30	0.038
COPPER	0.2	0.126	0.068	0.026	0.022
CHROMIUM	< 0.1	< .042	< .023	< 0.013	< .0054

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE C- Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.25	7.96	7.95	7.93	8.10
PCB 1016	0.9	0.125	NO RESULTS	~ 0.012	< 0.000063
PCB 1260	0.006	< 0.00042	NO RESULTS	0.0006	< 0.000063
CHLORIDE	150	125	88	80	55
TDS	8360	5426	3914	3371	2447
CADMIUM	< 0.01	< 0.0042	< 0.0022	< 0.0012	< 0.00063
LEAD	< 0.1	< 0.042	< 0.022	< 0.012	< 0.0063
ZINC	0.4	0.543	0.328	0.158	0.07
MERCURY	0.3	0.125	0.044	0.024	0.0127
CHROMIUM	< 0.1	< 0.042	< 0.022	< 0.012	< 0.0063

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

**STANDARD LEACHATE TEST
CONCENTRATION**

DOE

SAMPLE REFERENCE C - Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.9	7.7	8.03	8.14	8.0
PCB 1016	0.1	0.008	0.064	0.022	0.0019
PCB 1260	0.07	0.012	0.212	< 0.00011	0.0034
CHLORIDE	160	132	87	86	48
TDS	9840	8121	6512	3574	1792
LEAD	< 0.01	< 0.004	< 0.002	< 0.0011	< 0.00048
LEAD	< 0.1	< 0.04	< 0.02	< 0.011	< 0.0048
NIC	2.2	1.2	0.91	0.51	0.192
COPPER	< 0.1	0.0825	< 0.02	0.033	0.029
CHROMIUM	< 0.1	< 0.04	< 0.02	< 0.011	< 0.0048

L CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

D

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.97	8.24	8.16	8.34	8.15
PCB 1016	< 0.001	< 0.001	.002	0.6	< .001
PCB 1260	0.18	< 0.001	1.0	0.12	< 0.001
CHLORIDE	120	< 50	< 50	< 50	< 50
TDS	6600	7000	5720	4800	3040
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	0.45	< 0.1	0.25	0.23	0.5
ZINC	0.8	0.3	0.7	< 0.2	0.4
COPPER	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

D

CODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.12	8.13	8.04	8.11	8.13
PCB 1016	< 0.001	0.026	0.0044	< 0.00013	.005
PCB 1260	< 0.001	0.0033	< 0.00022	< 0.00023	< .00005
CHLORIDE	140	119	95	82	43
TDS	11240	7802	6200	4472	2132
CADMIUM	< 0.01	< 0.004	<.0022	< 0.0013	< 0.0005
LEAD	< 0.1	< 0.04	< .022	< 0.013	< 0.005
ZINC	0.7	0.37	0.31	0.39	0.029
COPPER	0.8	0.164	0.066	0.039	0.014
CHROMIUM	< 0.1	< 0.04	< 0.022	< 0.013	< 0.005

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE D - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.28	8.34	8.46	8.47
PCB 1016	0.1	0.007	< 0.001	0.08	0.008
PCB 1260	< .001	< .001	< 0.001	< .001	0.04
CHLORIDE	100	50	< 50	< 50	< 50
TDS	10960	4440	2520	3240	2440
LEAD	< .01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
COPPER	1.4	0.4	0.3	0.2	0.2
CHROMIUM	0.2	0.2	< 0.1	< 0.1	< 0.1
	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

NDARD LEACHATE TEST

DDE

RELEASE

SAMPLE REFERENCE D - Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.17	8.26	8.33	8.56	8.35
PCB 1016	0.1	0.06	0.02	0.023	< 0.001
PCB 1260	< 0.001	< 0.001	< 0.001	< .001	< 0.001
CHLORIDE	120	< 50	< 50	< 50	< 50
TDS	11320	3960	2800	2760	4360
CADMIUM	0.017	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	0.26
ZINC	1.6	0.6	0.3	0.2	0.5
COPPER	0.5	0.2	< 0.1	< 0.1	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

E

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.23	8.36	8.41	8.35	8.24
PCB 1016	< 0.001	< 0.001	.002	.01	.05
PCB 1260	0.16	0.019	0.25	< 0.001	< 0.001
CHLORIDE	120	< 50	< 50	< 50	< 50
TDS	12200	4800	3720	3560	4440
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	0.18
MERCURY	1.1	0.7	0.52	0.61	0.6
COPPER	< 0.1	0.3	0.2	0.3	0.3
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

DOE CONCENTRATION

SAMPLE REFERENCE

E

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.31	8.17	8.08	8.13	8.01
PCB 1016	0.09	0.39	0.164	< 0.00014	0.065
PCB 1260	< 0.001	< 0.0004	< 0.00023	< 0.00014	0.012
CHLORIDE	140	104	100	80	68
TDS	7360	6071	5574	4212	3289
CADMIUM	0.039	< 0.004	< 0.0023	< 0.0014	< 0.0008
LEAD	0.5	< 0.04	< 0.023	< 0.014	< 0.008
ZINC	1.6	0.39	0.21	0.108	0.049
COPPER	0.4	0.13	0.047	0.027	0.016
CHROMIUM	< 0.1	< 0.04	< 0.023	0.027	0.024

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

F

RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.26	8.32	8.50	8.35	8.34
PCB 1016	0.05	NO RESULTS	0.1	.02	.02
PCB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	40	< 50	< 50	< 50	< 50
TDS	4800	1600	1320	1280	1520
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	0.3	0.15	0.08	0.13	< 0.1
MPPER	0.4	0.4	0.3	0.2	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

F

CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.96	8.03	8.11	8.02	7.96
PCB 1016	~ 0.1	~ 0.042	~ 0.022	0.025	~ 0.0066
PCB 1260	< 0.001	< 0.00042	< 0.00022	< 0.00013	0.004
CHLORIDE	40	43	31	25	19
DS	3200	2568	2489	2026	1672
LEAD	< 0.01	0.009	0.0054	0.0053	0.004
MERCURY	0.24	0.187	< 0.022	< 0.013	< 0.0066
INC.	0.5	0.26	0.112	0.1	0.073
CHLORINE	0.7	0.21	0.112	0.063	0.04
HROMIUM	< 0.1	< 0.042	< 0.022	0.038	0.013

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

CONCENTRATION

SAMPLE REFERENCE

F - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.3	7.7	8.13	8.06	8.0
PCB 1016	NO RESULTS	< 0.0004	< 0.0002	.001	0.00041
PCB 1260	< 0.001	< 0.0004	0.002	< .000125	< 0.000059
CHLORIDE	100	45	18	39	30
TDS	3880	2961	2264	2171	1896
CADMIUM	< 0.01	0.0081	0.011	0.0075	0.004
LEAD	< 0.1	< 0.04	< 0.02	< 0.0125	< 0.0059
ZINC	0.4	0.20	0.164	0.163	0.106
LEAD	0.5	0.162	0.082	0.05	0.047
CHROMIUM	< 0.1	< 0.04	< 0.02	< 0.0125	< 0.0059

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE G

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.27	8.35	8.44	8.50
PCB 1016	< 0.001	.05	< 0.001	< 0.001	< 0.001
PCB 1260	< 0.001	< 0.001	< 0.001	0.02	< 0.001
CHLORIDE	80	< 50	< 50	< 50	< 50
TDS	12700	3720	2800	2400	3360
CADMIUM	0.02	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
MERCURY	1.1	0.3	0.3	0.4	0.2
COPPER	< 0.1	0.2	0.3	0.5	0.2
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE G

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
P	7.94	8.04	8.03	8.07	8.07
CB 1016	NO RESULTS	~ 0.042	~ 0.023	~ 0.013	0.07
CB 1260	NO RESULTS	< 0.00042	< 0.00023	< 0.00013	< 0.00007
CHLORIDE	50	85	77	57	53
DS	9960	8683	6639	4394	2466
LEAD	< 0.01	0.028	0.015	.0042	0.0047
MERCURY	< 0.1	< 0.042	< 0.023	< 0.013	0.0093
IRON	1.3	1.44	0.91	0.46	0.45
IRON(II)	0.7	0.254	0.136	0.038	0.043
IRON(III)	< 0.1	0.085	0.068	0.038	0.0143

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE HMODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.06	8.38	8.27	8.17	8.34
PCB 1016	0.002	0.01	< 0.001	< .001	< 0.001
PCB 1260	0.3	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	50	< 50	< 50	< 50	< 50
TDS	13000	2700	1800	1600	2480
CADMIUM	0.056	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	1.5	1.59	0.32	0.15	0.2
COPPER	0.2	0.3	0.3	0.2	0.4
CHROMIUM	0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

CODE CONCENTRATION

SAMPLE REFERENCE H

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.95	7.82	8.00	7.98	7.97
PCB 1016	0.02	0.3	~ 0.023	~ 0.013	0.03
PCB 1260	< 0.001	< 0.0004	< 0.00023	< 0.00013	0.00074
CHLORIDE	80	60	56	38	36
TDS	10520	9467	5952	3648	2386
CALCIUM	0.051	0.046	0.021	0.013	0.0067
LEAD	0.1	< 0.043	< 0.023	< 0.013	< 0.0074
IC	1.3	1.42	0.63	0.49	0.3
COPPER	0.4	0.17	0.12	0.08	0.052
CHROMIUM	< 0.1	< 0.043	< 0.023	< 0.013	< 0.0074

TOTAL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE

I

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.09	8.31	8.45	8.39	8.36
PCB 1016	0.02	0.007	0.008	0.002	< 0.001
PCB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	80	< 50	< 50	< 50	< 50
TDS	13900	4120	3360	2720	2840
CALCIUM	0.032	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	2.2	0.81	0.45	0.37	0.4
UPPER	0.2	0.4	0.3	0.3	0.4
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE I

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.03	6.90	7.32	8.11	8.27
CB 1016	0.01	0.021	0.0067	0.062	0.0053
CB 1260	0.02	< 0.00042	< 0.00022	< 0.00012	< 0.000066
CHLORIDE	150	84	67	52	40
DS	7800	7492	4481	3238	1976
ADMUM	0.084	0.066	0.021	0.019	0.011
Pb	0.5	0.114	< 0.022	< 0.012	< 0.0066
ZINC	2.5	1.43	0.58	0.56	0.106
PER	0.6	0.29	0.11	0.087	0.046
HROMIUM	< 0.1	0.084	0.045	0.025	0.013

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE I - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.1	7.6	8.0	8.09	8.1
PCB 1016	0.007	0.0084	< 0.0002	< 0.00011	0.0002
PCB 1260	< 0.001	< 0.0084	0.0107	< 0.00011	< 0.00005
CHLORIDE	50	101	43	64	39
DS	11560	10334	9678	3855	1837
LEAD	0.111	0.067	0.003	0.0016	0.0018
LEAD	< 0.1	< 0.042	< 0.022	< 0.0112	< 0.00495
ZINC	1.2	1.22	0.69	0.525	0.28
PER	0.4	0.294	0.065	0.045	0.025
CHROMIUM	< 0.1	< 0.042	< 0.022	< 0.0112	< 0.00495

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE JMODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.96	8.35	8.24	8.26	8.20
PCB 1016	0.014	.05	.003	0.2	0.1
PCB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	40	< 50	< 50	< 50	< 50
TDS	13480	5960	6640	3840	3160
CADMIUM	0.018	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	0.12	< 0.1	< 0.1	< 0.1	0.15
ZINC	2.3	0.6	0.4	0.4	0.5
COPPER	< 0.1	< 0.1	0.3	0.2	0.2
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

DARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE J Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.03	0.31	8.29	8.51	8.55
CB 1016	0.024	0.002	< 0.001	0.001	0.02
CB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	60	< 50	< 50	< 50	< 50
DS	12120	3080	1920	480	3760
ADMUM	0.027	< 0.01	< 0.01	< 0.01	0.012
SEAD	< 0.1	< 0.1	< 0.1	1.0	0.33
INC	1.0	0.2	0.2	0.2	< 0.1
PER	0.7	0.3	0.2	< 0.1	0.4
CHROMIUM	0.2	< 0.1	< 0.1	< 0.1	< 0.1

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE

J - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.03	8.31	8.29	8.51	8.55
PCB 1016	0.024	0.002	< 0.001	.001	0.02
PCB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	60	< 50	< 50	< 50	< 50
TDS	12120	3080	1920	480	3760
CADMIUM	0.027	< 0.01	< 0.01	< 0.01	0.012
LEAD	< 0.1	< 0.1	< 0.1	1.0	0.33
ZINC	1.0	0.2	0.2	0.2	< 0.1
COPPER	0.7	0.3	0.2	< 0.1	0.4
CHROMIUM	0.2	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

MODE

SAMPLE REFERENCE J - Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.27	8.32	8.47	8.46	8.38
PCB 1016	0.1	0.2	.02	.01	0.018
PCB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	60	< 50	< 50	< 50	< 50
TDS	11800	3920	2400	2000	1480
CADMIUM	0.056	< 0.01	0.012	0.012	0.013
LEAD	0.19	< 0.1	< 0.1	< 0.1	0.025
ZINC	1.3	0.5	< 0.1	< 0.1	0.5
COPPER	0.4	0.4	0.2	< 0.1	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

DOE

CONCENTRATION

SAMPLE REFERENCE J

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.28	8.04	8.17		
PCB 1016	0.2	0.20	0.00036		
PCB 1260	< 0.001	< 0.0004	< 0.00005		
CHLORIDE	50	59	16		
TDS	11160	6915	1329		
CADMIUM	0.028	0.026	0.008		
LEAD	< 0.1	< 0.04	< 0.005		
ZINC	0.8	0.784	0.094		
COPPER	0.3	0.12	0.026		
CHROMIUM	< 0.1	< 0.04	< 0.0005		

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE

J Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.02	8.01	7.89	7.65	7.81
PCB 1016	0.7	0.0208	0.066	0.00024	0.00013
PCB 1260	0.04	0.042	0.0153	0.0483	< 0.000064
CHLORIDE	100	75	61	66	37
TDS	11500	9868	7327	4513	3014
CADMIUM	< 0.01	< 0.0042	< 0.0022	< 0.0012	< 0.00064
LEAD	0.12	0.229	0.0525	< 0.012	0.0154
ZINC	0.7	1.26	0.525	0.483	0.045
COPPER	< 0.1	< 0.042	< 0.0022	< 0.012	< 0.0064
CHROMIUM	0.2	< 0.042	0.0022	0.012	0.0129

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE K

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.10	8.27	8.31	8.28	8.26
PCB 1016	0.1	< 0.001	0.09	< 0.001	0.03
PCB 1260	< 0.001	< 0.001	0.03	< 0.001	< 0.001
CHLORIDE	130	< 50	< 50	< 50	< 50
TDS	16300	3680	2680	3400	3680
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	0.9	0.56	0.42	0.57	0.50
COPPER	0.2	0.3	0.2	0.3	0.4
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

CONCENTRATION

SAMPLE REFERENCE K

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.94	6.85	7.25	8.03	8.09
PCB 1016	< 0.001	.017	0.045	0.0054	~ 0.007
PCB 1260	< 0.001	0.017	0.0113	< 0.0013	0.0007
CHLORIDE	150	127	93	78	53
TDS	9900	9737	6162	3537	2645
CADMIUM	0.014	< 0.0042	< 0.0023	< 0.0013	< 0.0007
LEAD	< 0.1	< 0.042	< 0.023	< 0.013	0.05
ZINC	0.9	0.466	0.25	0.18	0.07
COPPER	0.6	0.127	0.068	0.026	0.014
CHROMIUM	< 0.1	< 0.042	< 0.023	0.026	0.021

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE K - Duplicate

CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.1	7.6	8.05	7.96	8.2
PCB 1016	0.2	0.021	0.042	< 0.00011	< 0.000049
PCB 1260	0.07	0.084	0.0105	0.011	0.0049
CHLORIDE	200	139	103	81	52
TDS	15520	11366	6805	3988	1979
CALCIUM	< 0.01	0.0059	< 0.0021	< 0.0011	< 0.00049
LEAD	< 0.1	< 0.042	< 0.021	< 0.011	< 0.0049
ZINC	1.3	1.00	0.534	0.36	0.156
COPPER	0.2	0.126	0.085	0.044	0.024
CHROMIUM	< 0.1	< 0.042	< 0.021	< 0.011	< 0.0049

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE LMODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.98	8.92	8.61	8.56	8.34
PCB 1016	< 0.001	.1	.002	0.2	.09
PCB 1260	< 0.001	< 0.001	0.03	< 0.001	< 0.001
CHLORIDE	70	< 50	< 50	< 50	< 50
TDS	6840	3040	3320	3360	3800
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
INC	< 0.2	0.2	< 0.1	0.2	0.2
COPPER	0.9	0.6	0.4	0.3	0.3
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE L - Duplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.15	8.44	8.37	8.50	8.59
PCB 1016	.002	< 0.001	< 0.001	< 0.001	< 0.001
PCB 1260	0.3	< 0.001	0.036	.3	0.05
CHLORIDE	100	50	< 50	< 50	< 50
TDS	9400	2400	1680	1240	1400
CADMIUM	0.017	0.065	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	0.43	< 0.1	< 0.1	< 0.1
ZINC	1.2	0.8	0.2	0.2	< 0.1
COPPER	0.4	0.3	0.2	0.4	0.2
CHROMIUM	< 0.1	0.2	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

DOE

RELEASE

SAMPLE REFERENCE

L - Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.19	8.46	8.54	8.47	8.46
PCB 1016	0.2	0.005	0.04	0.04	0.02
PCB 1260	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHLORIDE	160	< 50	50	< 50	< 50
TDS	11760	2680	2760	1720	2600
CADMIUM	0.04	0.011	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	0.6	< 0.1	< 0.1	< 0.1	0.2
COPPER	1.4	0.9	0.5	0.5	0.4
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

DOE CONCENTRATION

SAMPLE REFERENCE L

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.99	7.08	7.40	8.10	8.11
PCB 1016	0.4	0.123	0.022	0.025	< 0.000066
PCB 1260	< 0.001	< 0.00042	0.0067	0.037	0.0133
CHLORIDE	40	127	114	81	57
TDS	6700	10404	6399	4067	2468
CADMIUM	0.14	0.074	0.011	0.018	0.0199
LEAD	0.12	< 0.042	< 0.022	< 0.0124	< 0.0066
ZINC	0.6	0.296	0.135	0.198	0.053
COPPER	0.4	0.21	0.54	0.31	0.093
CHROMIUM	< .01	< 0.042	< 0.022	< 0.0124	0.0133

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

MODE RELEASE

SAMPLE REFERENCE

M

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.14	8.12	8.32	8.41	8.46
PCB 1016	< 0.001	.006	.1	< 0.001	< 0.001
PCB 1260	< 0.001	0.06	< 0.001	< 0.001	< 0.001
CHLORIDE	70	< 50	< 50	< 50	< 50
TDS	8240	8240	2360	2000	3040
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	0.8	0.4	0.4	0.3	0.3
COPPER	< 0.1	0.6	0.2	< 0.1	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

CONCENTRATION

SAMPLE REFERENCE M

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.95	7.20	7.37		
CB 1016	NO RESULTS	NO RESULTS	0.018		
CB 1260	NO RESULTS	NO RESULTS	< 0.00022		
CHLORIDE	40	88	66		
DS	109.00	100.71	60.99		
LEAD	< 0.01	< 0.0042	0.034		
MERCURY	< 0.1	< 0.042	0.088		
NICKEL	0.5	0.46	1.73		
LEAD	< 0.1	0.084	0.197		
CHROMIUM	< 0.1	< 0.042	0.109		

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE M Triplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.1	7.6	7.85	8.0	8.1
PCB 1016	0.04	0.336	0.0064	0.022	0.00096
PCB 1260	< 0.001	0.0336	0.0043	~ 0.0112	< 0.000048
CHLORIDE	150	113	67	57	35
TDS	11400	8740	6232	3456	1796
CADMIUM	0.04	0.0126	0.025	0.0128	< 0.00048
LEAD	< 0.1	< 0.042	< 0.022	< 0.0112	< 0.0048
ZINC	1.2	1.22	1.096	0.67	0.23
COPPER	< 0.1	0.84	0.043	0.022	0.024
CHROMIUM	< 0.1	< 0.042	< 0.022	< 0.0112	0.0096

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

MODE CONCENTRATION

SAMPLE REFERENCE

M - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.22	N/A	8.09	8.11	8.23
PCB 1016	0.09	0.294	0.088	0.096	0.030
PCB 1260	0.3	< 0.00042	0.00044	0.024	0.0018
CHLORIDE	150	84	66	60	39
TDS	11320	7616	6131	3774	2155
CALMIUM	0.017	< 0.0042	< 0.0022	< 0.0012	< 0.0006
LEAD	< 0.1	< 0.042	< 0.022	< 0.012	< 0.006
ZINC	0.6	0.34	0.328	0.108	0.072
COPPER	0.2	0.084	0.044	0.036	0.018
CHROMIUM	< 0.1	< 0.042	< 0.022	< 0.012	< 0.006

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

N

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.09	8.24	8.40	8.45	8.50
PCB 1016	< 0.001	.08	.04	0.007	< 0.001
PCB 1260	0.018	0.56	< 0.001	< 0.001	< 0.001
CHLORIDE	90	< 30	< 50	< 50	< 50
TDS	14520	4000	3160	2600	2840
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC	1.0	0.3	0.3	0.3	0.2
COPPER	0.2	0.5	0.3	0.3	0.2
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

N

E CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.05	7.26	7.30	8.03	8.11
PCB 1016	0.3	0.382	0.0225	0.0125	< 0.00006
PCB 1260	0.2	0.085	< 0.000225	< 0.000125	0.0005
CHLORIDE	150	127	79	70	51
TDS	15500	14334	7569	4730	2858
CADMIUM	< 0.01	< 0.0042	< 0.00225	< 0.00125	< 0.0006
LEAD	0.22	0.042	0.025	< 0.0125	< 0.006
ZINC	1.0	0.42	0.157	0.125	0.032
COPPER	0.2	0.085	0.067	0.038	0.019
CHROMIUM	< 0.1	0.085	0.045	0.025	< 0.006

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

MODE CONCENTRATIONSAMPLE REFERENCE N - Duplicate

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.26	N/A	8.08	8.03	8.14
PCB 1016	0.1	0.0676	~ 0.0225	0.00126	0.0026
PCB 1260	0.6	< 0.00042	< 0.000225	< 0.000126	~ 0.0066
CHLORIDE	150	127	90	68	54
TDS	12160	10035	7449	4659	3014
CADMIUM	< 0.01	< 0.0042	< 0.00225	< 0.00126	< 0.00066
LEAD	< 0.1	< 0.042	0.056	< 0.0126	< 0.0066
ZINC	0.4	0.211	0.203	0.20	0.066
COPPER	0.3	0.084	0.068	0.025	0.013
CHROMIUM	< 0.1	< 0.042	0.045	0.025	0.013

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE 0

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.11	8.44	8.24	8.51	8.40
D 1016	.05	0.1	0.07	0.1	0.2
D 1260	0.1	< 0.001	0.009	0.04	0.03
CHLORIDE	90	< 50	< 50	< 50	< 50
S	13960	5120	3680	3560	2480
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ADMUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
IRON	1.1	0.3	0.2	0.2	0.3
MERCURY	< 0.1	< 0.1	< 0.2	< 0.1	< 0.1
PLATINUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

0

MODE CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.10	N/A	7.78	7.84	7.88
PCB 1016	0.5	0.038	0.044	0.012	0.0025
PCB 1260	0.1	0.0084	0.065	< 0.00012	< 0.00006
CHLORIDE	130	125	74	63	48
TDS	9600	6033	5338	4136	2873
CADMIUM	< 0.01	< 0.0042	< 0.0022	< 0.0012	< 0.0006
LEAD	< 0.1	< 0.042	< 0.022	< 0.012	< 0.006
ZINC	0.6	0.167	0.26	0.18	0.070
COPPER	< 0.1	< 0.042	< 0.022	0.048	0.0127
CHROMIUM	< 0.1	< 0.042	< 0.022	< 0.012	< 0.006

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE

0 - Duplicate

MODE RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.16	8.33	8.46	8.40	8.40
PCB 1016	.04	.006	0.03	0.0048	< 0.001
PCB 1260	0.04	< 0.001	0.003	0.058	< 0.001
CHLORIDE	100	< 50	< 50	< 50	< 50
TDS	10880	2320	1680	1120	1160
CADMIUM	< 0.01	0.011	< 0.01	0.011	< 0.01
LEAD	< 0.1	0.47	< 0.1	< 0.1	< 0.1
ZINC	1.0	0.4	< 0.1	< 0.1	< 0.1
COPPER	0.2	0.2	< 0.1	< 0.1	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

RELEASE

SAMPLE REFERENCE

0 - Triplicate

DOE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	7.97	8.29	8.48	8.45	8.46
PCB 1016	0.2	0.05	0.04	< 0.001	< 0.001
PCB 1260	0.5	0.01	< 0.001	< 0.001	< 0.001
CHLORIDE	120	< 50	< 50	< 50	< 50
TDS	12120	3560	2680	2320	2440
CADMUM	< 0.01	< 0.01	0.024	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	0.5	< 0.1	< 0.1
ZINC	0.8	0.5	0.9	0.3	0.3
COPPER	< 0.1	0.2	0.2	0.2	0.2
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEMACHE TEST

DOE

RELEASE

SAMPLE REFERENCE LAGOON C

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.47	8.53	8.23	8.25	8.24
PCB 1016	0.2	0.002	0.009	0.05	0.03
PCB 1260	< 0.001	0.05	< 0.001	0.02	< 0.001
CHLORIDE	500	160	80	60	60
TDS	5920	2120	4640	7040	7520
CADMIUM	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
IRON	0.2	0.3	0.2	0.7	1.0
COPPER	0.1	0.1	< 0.1	< 0.1	< 0.1
CHROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE LAGOON C DUPLICATE

RELEASE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.48	8.51	8.38	8.25	8.23
PCB 1016	0.006	0.02	0.03	0.3	0.14
PCB 1260	< 0.001	0.4	< 0.001	0.3	< 0.001
CHLORIDE	460	160	100	60	60
TDS	4800	2200	4920	5600	7120
LEAD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
COPPER	0.2	0.1	0.2	0.6	1.2
HROMIUM	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

CONCENTRATION

SAMPLE REFERENCE LAGOON C

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.48	8.48	8.43	8.43	8.50
PCB 1016	0.2	0.096	NO RESULTS	0.0152	0.0098
PCB 1260	< 0.001	< 0.00048	< 0.00026	< 0.000152	< 0.000098
CHLORIDE	500	312	241	188	146
TDS	5160	3549	2636	1698	1332
CADMIUM	< 0.01	< 0.0048	< 0.0026	< 0.00152	< 0.00098
LEAD	< 0.1	< 0.048	< 0.026	< 0.0152	< 0.0098
ZINC	< 0.1	< 0.048	0.041	0.0152	0.0294
COPPER	< 0.1	< 0.048	< 0.026	0.046	< 0.0098
CHROMIUM	< 0.1	< 0.048	< 0.026	< 0.0152	< 0.0098

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST
CONCENTRATION

SAMPLE REFERENCE LAGOON C DUPLICATE

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.62	8.46	8.43	8.43	8.56
PCB 1016	0.02	0.0098	0.0014	0.00081	0.0056
PCB 1260	< 0.001	< 0.00049	< 0.0027	< 0.00016	< 0.000056
CHLORIDE	500	336	254	201	84
TDS	5760	4485	2745	1946	702
CALCIUM	< 0.01	< 0.0049	< 0.0027	< 0.0016	< 0.00056
LEAD	< 0.1	< 0.049	< 0.027	< 0.016	< 0.0056
ZINC	0.2	0.049	0.054	0.032	0.0112
COPPER	0.1	< 0.049	0.108	0.016	< 0.0056
CHROMIUM	< 0.1	< 0.049	< 0.027	0.016	< 0.0056

ALL CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.

STANDARD LEACHATE TEST

SAMPLE REFERENCE LAGOON C Triplicate

E CONCENTRATION

PARAMETER	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
pH	8.45	8.40	8.30	8.43	8.62
PCB 1016	0.3	0.0435	0.0026	0.0056	< 0.000085
PCB 1260	0.1	< 0.00048	< 0.00026	< 0.00014	< 0.000085
CHLORIDE	400	333	253	187	151
TDS	4640	4234	2297	1615	1349
LEAD	0.035	0.0213	< 0.0026	< 0.0014	< 0.00085
ZINC	< 0.1	< 0.048	< 0.026	< 0.014	< 0.0085
COPPER	0.75	0.097	0.026	0.056	0.034
CHROMIUM	< 0.1	< 0.048	< 0.026	< 0.014	< 0.0085

CONCENTRATION EXPRESSED AS MILLIGRAMS PER KILOGRAM EXCEPT pH.